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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/675,369

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EXAMINER

NGUYEN, PHUONGCHAU BA

ART UNIT

PAPER NUMBER

2616

NOTIFICATION DATE

DELIVERY MODE

10/05/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/675,369

Applicant(s)

WILDFEUER ET AL.

Examiner

Phuongchau Ba Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-9, 11-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 12-15, 18 and 19, 21-23 is/are rejected.
- 7) ☒ Claim(s) 5, 11, 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

1. Claims 7-9, 11-15, 17-18, 22-23 are objected to because of the following informalities: "operable" should be removed from the claimed language to make the claim more positive in its recitation. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 13-15, 17-18, 23 are rejected under 35 U.S.C. 101 because the logic in claims 13-15, 17-18 and 23 are data structures which defined in MPEP 2106.01, wherein "*data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural*

and functional interrelationships between the data structure and other claimed aspects of the invention which permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d

at 1035. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions.

Computer programs are often recited as part of a claim. USPTO personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. The same result occurs when a computer program is used in a computerized process where the computer executes the instructions set forth in the computer program. Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material per se and hence nonstatutory. Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 7-9, 13-15, 19, 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,327,276 to Robert et al.

Regarding claims 1, 7, 13 and 19,

Robert teaches a method and system for managing a multicast conference call, comprising the steps of, and elements, logic and means for:
receiving a plurality of signals (e.g., receiving signals from the network, see col. 2, lines 41-45) at a local endpoint (e.g., at a client, see col. 2, lines 41-49 & 61-65) participating in a multicast conference call (e.g., see col. 2, lines

61–65 regarding multicast signal and see col. 3, line 65 – col. 4, line 29

regarding conference call) among the local endpoint and one or more remote endpoints (e.g., other clients), the plurality of signals comprising a local signal and one or more remote signals (e.g., see col. 2, lines 46–65 regarding signals transmitted to a plurality of clients and mixed in the multicast signal), the local signal associated with the local endpoint (e.g., see col. 6, lines 52–67 regarding the particular client), each remote signal associated with a remote endpoint (e.g., client on WAN, see col. 5, lines 33–42) of the one or more remote endpoints (e.g., clients on WAN, see col. 5, lines 33–42);

determining, at the local endpoint, a plurality of metric ratings (e.g., determining the multicast signal to remove its own component from the multicast signal, see col.5, line 56–col. 6, line 2), each metric rating reflecting an importance of a signal of the plurality of signals (e.g., the client removes its own component from the multicast signal, see col. 5, lines 56–61), the plurality of metric rating comprising a local metric rating (e.g., its own signal, see col. 5, lines 51–61) and one or more remote metric ratings (e.g., other signals of other clients in the received multicast signal, see col. 5, lines 51–61), the local metric

rating corresponding to the local signal (e.g., signal intended for the particular client), each remote metric rating corresponding to a remote signal of the one or more remote signals (see col. 5, lines 51–61);

comparing the local metric rating and the one or more remote metric ratings (e.g., to remove its own component, see col. 5, lines 51–61); and

selecting a subset (e.g., selecting its own component to be removed for echo cancellation purpose) of the plurality of signals according to the comparison in order to manage the multicast conference call (e.g., see col. 5, lines 51–61 and col. 6, lines 53–67).

Regarding claims 2, 8 and 14, Robert teaches steps, elements and logic for mixing the remote signals of the subset of the plurality of signals (e.g., via mixer, see col. 6, lines 26–51); and outputting the mixed remote signals of the subset of the plurality of signals (e.g., via creating the multicast signal, see col. 6, lines 26–51).

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Regarding claims 3, 9 and 15, Robert teaches steps, elements and logic for determining if the subset of the plurality of signals comprises the local signal (e.g., see col. 3, line 65 – col. 4, line 29 and col. 6, lines 52–67 regarding the client receiving the multicast signal); and transmitting the local signal if the subset of the plurality of signals comprises the local signal (e.g., see col. 6, lines 52–67 regarding the particular client removing its own component from the multicast signal and transmitting the multicast signal).

Regarding claims 21–23, Robert further discloses wherein determining the plurality of metric ratings comprises:

Establishing one or more metric values for a signal of the plurality of signals according to a metric appended to the signal (see col.5, lines 51–61 wherein the particular client receives the multicast signal and determining its own component (i.e., the echo value reflecting the metric value as claimed) in the multicast signal, emphasis added); and

Determining metric rating of the signal in accordance with the one or more metric values (i.e., determining from the multicast signal its own

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component and removed its own component to send the remain signal (echo free) which contains the conferenced signals of the other users, see col.5, lines 51-61).

Claim Rejections – 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6, 12, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert (6,327,276) as applied to claims 1, 7 & 13 above, and further in view of Laursen (US 2003/0002481 A1).

Regarding claims 6, 12 and 18,

Robert discloses all the claimed limitations, except wherein the subset of the plurality of signals according to the comparison comprises: (1a) identifying

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a predetermined number of highest ranked metric rating; and (1b) selecting the signals corresponding to the highest ranked metric ratings.

However, in the same field of endeavor, Laursen discloses determining whether the priority of second received audio stream greater than priority of first audio received stream, see step 916–fig.9B, corresponding to (1a); and if greater, then holding the transmission of the first audio stream and starting transmission of second audio stream, see 918 & 920 in fig.9B, corresponding to (1b). Therefore, it would have been obvious to an artisan to apply Laursen's teaching to Robert's system with the motivation being to provide conference call processing with carrier grade quality and providing resource manager capability to barging into audio stream based on certain predefined events, i.e., emergency event, time event, on hold condition, signaling condition...etc.

Allowable Subject Matter

8. Claim 20 is allowed.
9. The following is an examiner's statement of reasons for allowance: The prior art does not teach or fairly suggest a method such as that described in

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independent claim 20 which comprises steps for establishing one or more metric values for a signal according to an appended metric to the signal; generating a metric vector for each signal and applying a function to each metric vector to generate a metric rating for each signal; and identifying a predetermined number of highest ranked metric ratings and selecting the signals according to the highest ranked metric ratings as recited in claim 20.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

10. Claims 5, 11, 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or fairly suggest a method, system

and logic such as that described in independent claims 1, 7 and 13, respectively, which further comprises steps, elements and/or logic for establishing one or more metric values for a signal according to an appended metric to the signal; generating a metric vector for each signal and applying a function to each metric vector to generate a metric rating for each signal; or identifying a predetermined number of highest ranked metric ratings and selecting the signals according to the highest ranked metric ratings as recited in 5, 11, 17.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,717,921 to Aggarwal et al. and U.S. Patent Application Publication No. 2002/0186827 by Griffiths each disclose methods for managing multicast conference calls.

Response to Arguments

13. Applicant's arguments filed 7-24-07 have been fully considered but they are not persuasive.

A/. Applicant argued that Robert does not disclose "determining, at the local endpoint, a plurality of metric ratings, each metric rating reflecting an importance of a signal of the plurality of signals".

In reply, applicant is directed to column 5, lines 51-61 of Robert disclosing that a particular client (or each client, emphasis added) receives the multicast signal then removes its own component (importance of its signal) from the signal and output the remaining signal which contains the conferenced signals of other users in the conference call but substantially no "echo" of that particular client's (or each client's, emphasis added) output signal.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuongchau Ba Nguyen whose telephone number is 571-272-3148. The examiner can normally be reached on Monday-Friday from 10:00 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Phuongchau Ba Nguyen
Examiner
Art Unit 2616



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